Master’s Thesis – Purchasing and R&D collaboration in the development of complex Electronic Control Units - Scania

Background

Driving the shift towards sustainable transport solutions requires identifying and capturing knowledge and innovation at our supplier base, in order to source the technologies needed for Scania’s products at commercially favorable conditions. To achieve this, Purchasing and Research & Development (R&D) work in close collaboration, spanning the boundaries of the company towards the supplier market. Especially in the area of complex Electronic Control Units (ECUs) and e_mobility, our supplier base is going through rapid changes, with players such as semiconductor companies, Electronics Manufacturing Services (EMS), and software providers becoming more prominent sources of innovation and challenging the typical automotive sourcing and collaboration models. This changing landscape provides new opportunities for the Purchasing and R&D to further collaborate in identifying and capturing these innovations in the supplier market. A master’s thesis is proposed to investigate how the current Purchasing-R&D collaboration models can and will have to be revisited in order to address changing dynamics in the electronics and electrification supplier market.

Goals of the Master’s Thesis

The following list contains preliminary goals of the master’s thesis, which will be refined together with the supervisors upon start of the thesis work:

- Map how Purchasing and R&D collaborate to identify and capture innovation from the supplier base for complex ECUs
- Understand challenges and strengths of the current Purchasing-R&D collaboration
- Identify challenges and opportunities in Scania’s shift to sustainable transport solutions and posed by changes in the electronics supplier market
- Propose changes based on findings from empirical investigation, comparison to other cases inside and outside the automotive industry, and lessons from the theory

Expected outcomes

The master’s thesis is expected to generate an understanding of how the Purchasing and R&D functions work together today and more importantly to support our understanding of what this collaboration will look like in the future. In addition, the thesis students will be in contact with the daily work of the purchasing functions and learn about its cross-functional work.

Requirements and the application process

- Registered in a Master’s program in Business or Engineering at Chalmers
- It is preferred that students write the master’s thesis in pair
- Geographical location: Scania Global Purchasing in Södertälje. Scania accommodation (rental apartment) can be organized
- Applications must be sent latest on October 15th, 2022

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